The 11th Symposium on Accelerator Science and Technology

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The 11th Symposium on Accelerator Science and Technology was held during October 21-23, 1997 at the Center for Advanced Science and Technology near the SPring-8 facility site. The symposium, the biggest one involving accelerator science and technology in Japan, was first held at KEK, Tsukuba in 1975 and then for about every two years at several other institutes with accelerator facilities. This time, it was handled by SPring-8 as the host institute.

The symposium provided a good chance for SPring-8 to open its facility to the Japanese accelerator community, since the facility had just completed construction of accelerator complex and succeeded in commissioning its storage ring in March 1997. In fact, a lot of accelerator engineers and scientists had been showing a strong interest in the facility and had participated in a tour of the facility the day prior to the symposium.

The number of participants in the symposium amounted to 301 (205 from universities, colleges, and public institutes. 62 from companies, and 34 students). An encouraging sign of the future for the accelerator community was that many young participants attended the symposium.

Two invited talks focused on *the Science of Anti-protons* by T. Yamazaki, and *Why Do We Want Synchrotron Radiation for Determining Protein Structures?* by Y. Katsube. Four special talks reviewed the present status of advanced accelerator facilities for future projects: *Present Status of R&D for Linear Colliders* by K. Takata, *B, τ-charm and φ Factories* by S. Kurokawa, *Recent Progress of Heavy Ion Accelerators* by T. Katayama, and *Third Generation Light Sources* by Y. Kamiya. Five special talks reviewed the present status and development of accelerator technologies: *RF Accelerator Cavities for Electron Storage Rings* by Y. Yamazaki, *Beam Diagnoses* by T. Kasuga, *Introduction to Free Electron Laser in Electron Storage Rings* by H. Hama, *Insertion Devices in Third-generation Light Sources* by H. Kitamura, and *Recent Progress and Perspectives of Laser-plasma Accelerators* by K. Nakajima. These general talks attracted and impressed many of the participants.

In addition, 44 oral presentations and 134 poster presentations were made. There were a number of stimulating discussions. Some of them were as follows. *Longitudinal Beam Dynamics in Operation with Negative Momentum Compaction Factor on the UVSOR Electron Storage Ring* by M. Hosaka et al, *A New Type of RF Cavity for High Intensity Proton Synchrotron* by Y. Mori et al, *High Power Test of a Proto-type Tuning-free Cavity with an All-pass Network* by S. Ano et al, *C-band Klystron & RF-system Development* by T. Shintake et al, *A New Dipole Bending Magnet with Improved Magnetic Distribution* by M. Umezawa et al, and *A Measurement of Beam Size of AURORA by the Use of SR-interferometer at SR Center of Ritsumeikan University by* T. Mitsuhashi et al.

The proceedings of the symposium were prepared in the traditional manner and handed to the participants during the symposium. The symposium was partly supported by 11 companies who presented exhibitions of their own excellent products. The next symposium is to be held at RIKEN in two years.